Abstract

Disclosed is a method and apparatus for updating an on-board clock device, for instance a clock that is embodied on a time-stamping cipher module, to compensate for individual deviation from an external time-source. Typically, a computer system, such as

5   a network server, is in communication with a cryptographic system comprising a plurality of time-stamping cipher modules that provide dedicated time-stamping and cryptographic functions for the computer system. Due to individual clock drift, the synchronization of time values provided by the on-board clocks of the plurality of modules tends to decrease over time. Periodically, each module provides a signal indicating a time associated with

10   the module to each of other modules of the plurality of modules for determining a synchronization between the modules and for detecting modules that are other than synchronized with the synchronized modules. When a module is detected as other than synchronized with the synchronized modules, that module is automatically deactivated or alternatively that module is synchronized with the synchronized modules.

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